

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Safety and Enforcement Division
Rail Transit Safety Branch

Resolution ST-173
May 7, 2015

RESOLUTION

**RESOLUTION ST-173 GRANTING SANTA CLARA
VALLEY TRANSPORTATION AUTHORITY AND BAY AREA
RAPID TRANSIT DISTRICT A VARIANCE FROM GENERAL
ORDER 95, SECTION 79.4 (A) & (B) FENCING DESIGN**

SUMMARY

This resolution grants Santa Clara Valley Transportation Authority (VTA) / Bay Area Rapid Transit District's (BART) request for a variance to General Order (GO) 95, Section No. 79.4 (A) and (B) fencing requirements for the BART Silicon Valley Berryessa Extension (SVBX) Project to accommodate a City of Milpitas request to provide fencing that better matches the aesthetics of the planned surrounding environment. Specifically, VTA/BART requests approval for the option to install alternative ornamental fencing adjacent to the BART guideway in the Piper Drive area as an "equal" protection to that specified in GO 95.

PROJECT DESCRIPTION

The VTA's BART Silicon Valley Extension Project is a 16-mile extension of the BART system to Santa Clara County. This extension of the BART system to Santa Clara County and the San Jose area is being coordinated and funded by VTA, and will be turned over to BART to operate. The project is being delivered with a phased approach. The first phase, the Berryessa Extension, is a 10-mile, two-station BART extension. This extension begins in Fremont, south of the future Warm Springs BART Station, and proceeds in the former Union Pacific

Railroad right-of-way through Milpitas, the location of the first station, to the Berryessa area of North San Jose, the location of the second station. The Berryessa Extension is under construction with opening planned for late 2017. Staff has reviewed and the Commission has approved the Safety and Security Certification Plan for the first phase project in its Resolution ST-83.

BACKGROUND

By a letter dated September 12, 2014, VTA/BART requested a variance to GO 95, Section 79.4 (A) and (B) to install a different type of fence for the BART Silicon Valley Berryessa Extension SVBX Project to accommodate a City of Milpitas request to provide fencing that better matches the aesthetics of the planned surrounding environment. Specifically, VTA/BART requests approval for the option to install alternative ornamental fencing adjacent to the BART guideway in the Piper Drive area as an "equal" protection to that specified in GO 95. The length of the alternative ornamental picket fence is approximately 1200 feet. The letter requests a variance from the fencing design GO 95 requirements for the installation of this new fence. Their request letter and attachments are included in Appendix A.

GO 95, Overhead Electric Line Construction, Section 79.4 Fencing states:

A. At Ground Level

Third rail construction or reconstruction shall not be permitted at ground level unless the rights-of-way, easement or other property upon which the same is located is entirely fenced. Fence construction shall be designed, installed and maintained in such manner as to deny access over, under or through the fencing to all but authorized persons.

B. Material and Height

Fencing material shall be of galvanized steel, woven mesh or links (commonly known as chain-link or cyclone fencing), extending from ground level to a minimum height of seven feet. Above said 7 foot height, there shall be installed an inclined extension of not less than 12 inches, to which shall be attached no fewer than three strands of barbed wire, with said extension being inclined 45° away from the fenced facilities wherever possible.

VTA/BART's request letter, dated September 12, 2014, specified that BART operates within a dedicated right-of-way and does not share street crossings with automobiles or other transit systems. Therefore, the BART system is grade separated with BART operating in an underpass or overpass configuration to city

streets. At these grade-separated street crossings, BART intends to install a 9-foot high fence from walking surface made up of painted or galvanized woven mesh. Please note this fence configuration will not have "three strands of barbed wire, with said extension being inclined 45° away from the fenced facilities"

On the east side of the BART corridor along Piper Dr., VTA/BART intends to install an alternative ornamental picket fence with the features listed below. The limits of the ornamental picket fence are shown on sheets C107, C108 and C101, included with their request, and attached in Appendix A.

Ornamental Picket Fence Features:

- Painted steel square post with pointed top spaced at approximately eight feet.
- Painted steel pickets that will extend from walking surface to achieve a total fence height (with or without concrete barrier) of nine feet above walking surface.
- The top 19 inches of the pickets will be inclined away from BART corridor projecting 10 inches horizontally at approximately 27 degrees from vertical. Top end of the pickets will be pointed as shown on sheet FSK-02.
- A coated steel wire fabric with openings approximately one inch by one inch will be fastened to the fence.

Refer to following attachments of their request, included in Appendix A:

- SVBX LTSS Location Map, Dwg LS FSKO I
- SVBX LTSS Design Unit 012 Piper Drive Layout Plan Dwg LM C107
- SVBX LTSS Design Unit 012 Piper Drive Layout Plan Dwg LM CI 08
- SVBX LTSS Design Unit 012 Montague Expressway Layout Plan Dwg LM CI 01
- SVBX Panel Fence Details Dwg 13 S273
- SVBX LTSS Industrial Strength Steel AEGIS II Invincible 2-Rail Dwg EXH SK02

DISCUSSION

The fence configurations were reviewed with CPUC Staff, BART System Safety, and BART Police representatives at the SVBX Fire/Life/Safety & Security Committee (FLSSC) meeting held on September 12, 2013, at the project office in Milpitas, CA. The final fence configurations incorporated all comments voiced at the FLSSC meeting and it was determined that these configurations will achieve the following:

- Provide an equivalent level of safety and security for the BART guideway as is required by GO 95, Section 79.4 (B).
- Provide aesthetic treatments as requested by the City of Milpitas.

Staff has reviewed VTA/BART's request and the proposed fencing design in the context of the existing GO requirements and believes that the fencing is essentially equivalent and that granting the variance will not have an adverse effect on system safety.

NOTICE

On March 30, 2015, BART's variance request was published on the Commission's Daily Calendar.

COMMENTS

The draft resolution of the Safety and Enforcement Division) in this matter was mailed in accordance with Section 311 of the Public Utilities Code and Rule 14.2(c) of the Commission's Rules of Practice and Procedure. No comments were received.

FINDINGS

1. By a letter dated September 12, 2014, VTA/BART requested a permanent variance to the fencing design requirement required by GO 95, Section 79.4 (A) and (B) for an area in Milpitas (near Piper Drive).
2. VTA/BART proposes to install a new 9-foot high fence made up of painted or galvanized pickets with woven mesh on the east side of the BART corridor along Piper Drive as requested by the City of Milpitas.
3. General Order 95 Section 79.4 (A) and (B) fencing requirements will be closely achieved using an equivalent level of fencing protection and an acceptable design agreed to by all approving parties.

4. The fence configuration will not have the “three strands of barbed wire, with said extension being inclined 45° away from the fenced facilities,” but will have similar inclined, pointed galvanized steel pickets in their stead.
5. The length of the alternative ornamental picket fence is approximately 1200 feet.
6. VTA/BART and Rail Transit Safety Branch staffs are in agreement that the proposed fence will have equal protection to that specified in GO 95 and will not significantly impact public safety or security.

THEREFORE, IT IS ORDERED THAT:

1. Santa Clara Valley Transportation Authority / Bay Area Rapid Transit’s request for a variance to General Order 95, Section No. 79.4 (A) and (B) fencing requirements for the BART Silicon Valley Berryessa Extension Project to accommodate a City of Milpitas request to provide fencing that better matches the aesthetics of the planned surrounding environment is granted.
2. This resolution is effective today.

I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting held on May 7, 2015. The following Commissioners voting favorably thereon:

TIMOTHY SULLIVAN
Executive Director

APPENDIX A